

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P. D. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO. FIL		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,433		12/12/2001	Martin Kranz	5318/CALB/COPPER/PJS	5742
32588	7590	7590 03/04/2004		EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061				TRAN, BINH X	
SANTA CL				ART UNIT	PAPER NUMBER
				1765	

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) 10/015,433 KRANZ ET AL. **Advisory Action** Examiner **Art Unit** Binh X Tran 1765 --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 10 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. PERIOD FOR REPLY [check either a) or b)] The period for reply expires months from the mailing date of the final rejection. The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 1. A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal. 2. The proposed amendment(s) will not be entered because: (a) they raise new issues that would require further consideration and/or search (see NOTE below); (b) they raise the issue of new matter (see Note below); (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) they present additional claims without canceling a corresponding number of finally rejected claims. NOTE: . 3. Applicant's reply has overcome the following rejection(s): 4. Newly proposed or amended claim(s) ____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the

6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly

7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

8. . The drawing correction filed on ____ is a) approved or b) disapproved by the Examiner.

9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s).

application in condition for allowance because: See Continuation Sheet.

raised by the Examiner in the final rejection.

Claim(s) withdrawn from consideration:

Claim(s) allowed: 18.

Claim(s) objected to: ____.
Claim(s) rejected: <u>1-5,7-11,32</u>.

The status of the claim(s) is (or will be) as follows:

NADINE G. NORTON SUPERVISORY PATENT EXAMINER

10. ☐ Other:

Continuation of 5. does NOT place the application in condition for allowance because:

The applicants agree with the examiner's position that Hills discloses a plasma etching gas mixture includes fluorocarbon gas, nitrogen gas, oxygen, an inert carrier gas and hydrogen-containing addictive gas such as H2. However, the applicants argue that there is no basis for finding or suggestion of a plasma from a gas mixture consisting of a non-reactive gas and a reactive gas selected from the group consisting of fluorine containing gas, and hydrogen gas. According to applicants "There is no teaching or suggestion in Hills et al. to SPLIT the gas mixture including fluorocarbon gas, N2, O2, an inert carrier gas and hydrogen-containing addictive gas into TWO gas mixtures, one of which consists of an inert carrier gas and a hydrogen-containing additive gas". The examiner disagrees with this argument. The examiner never suggests to physically split the gas mixture of Hills into TWO separate gases as suggested by applicants. The examiner merely classifies all the gas that discloses in Hills into a specific generic group according to their chemistry property. The examiner classifies/labels the inert gas in Hills reference as non-reactive gas. The examiner classifies/labels the fluorocarbon gas and hydrogen in Hills' reference as a reactive fluorine containing gas and reactive hydrogen gas respectively. The examiner clearly recognizes that Hills discloses additional gas (i.e. O2) that does not belong to the gas chemistry group as disclosed by applicants. However, since the applicants use the term "comprising" in the preamble of claim, the examiner certainly reserves the right to interpret any additional gas used in the in the prior arts process belong to "other elements are not excluded from the claim as a whole" (See MPEP 2111.03). The examiner interprets any additional gas in Hills reference is just another gas mixture co-exist with the same gas mixture claimed by applicants. Further, there is no limitation in the claim to explicitly exclude any additional gas mixture co-existing with the same gas mixture claimed by applicants. Thus, the examiner still maintains all rejections in previous office action.

Binh X. Tran